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"KIPP" Support -



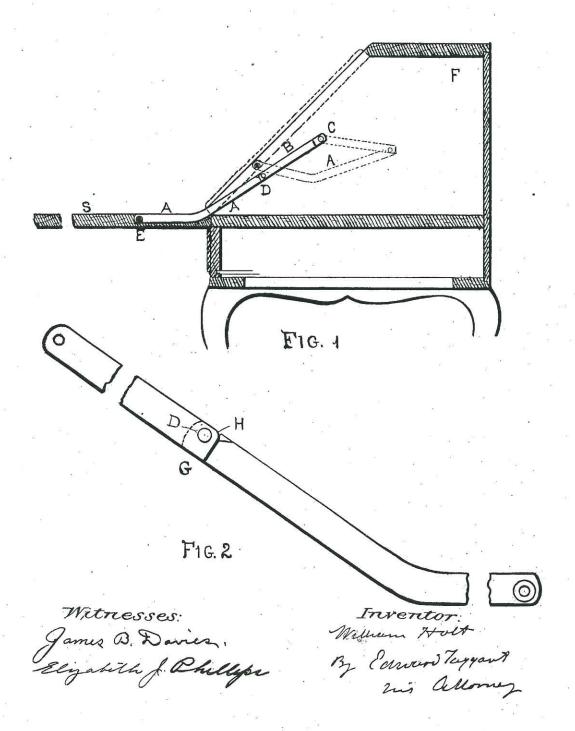
Derk filled with "HOLT Bukkortcoming flush with fall - no unsightly and inconvenient bars projecting above fall (oilid)

No. 711,315.

Patented Oct. 14, 1902.

W. HOLT.
DESK LID SUPPORT.
(Application filed Apr. 1, 1901.)

(No Model.)



## UNITED STATES PATENT OFFICE.

## WILLIAM HOLT, OF GRAND RAPIDS, MICHIGAN.

## DESK-LID SUPPORT.

SPECIFICATION forming part of Letters Patent No. 711,315, dated October 14, 1902.

Application filed April 1, 1901. Serial No. 53,889. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HOLT, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in Desk-Lid Supports, of which the following is a specification.

My invention relates to a new and useful desk-lid support; and the invention consists in the combination, with a desk and lid, of a support consisting of a bar and link so constructed and attached to the lid and desk as to hold the desk-lid in a horizontal position when opened by means of the support alone.

The objects of my invention are, first, to simplify the construction of desk-lid supports; second, to dispense with the leverage action upon the support. These objects I accomplish by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 shows a vertical sectional view of a desk having the lid supported by my invention, the solid lines showing the position of the lid and lid-support when opened and the dotted lines showing the position of the lid-support when the lid is closed. Fig. 2 shows an enlarged view of the lid-support detached, illustrating the position of the two bars of the lid-support when open.

Similar letters refer to similar parts throughout both views.

A represents the bent or angled portion of the bar which forms a part of the lid-support.

B represents the link or short bar which 35 is pivoted to the bent bar A.

C shows the pivot which secures the bar B

to the desk.

D shows the pivot which attaches together the bent bar A and the bar B, the dotted lines 40 in Fig. 1 showing the position of the parts

when the desk-lid is closed.

F shows the desk to which the support is

pivoted.

E is the pivot which attaches the bar A to

45 the desk-lid S.

In Fig. 2 it will be noticed that D is placed near one side of the bars which are pivoted together. One of the bars is rounded, as shown by H, for the purpose of forming a clear-

G shows the position of the two bars meeting each other when the desk is open. The

bar B turning upon the pivot D can be folded readily in one direction; but when it reaches a position so as to be in a line with the part of the 55 bent bar A to which it is attached it is stopped by the meeting of the ends, which form shoulders, so the movement of the connected parts will be arrested when the desk-lid is open, as shown in Fig. 2 by G. Other forms of stops 60 for the center joint of the bars can be employed, if desirable. When the desk-lid is open, the strain is in the direction of a line drawn between the pivot E and the pivot C, and the bars A and B act as a single bar, they 65 being connected so as to prevent them from opening beyond a straight line, as shown in Fig. 1. The lid S is attached to the case by any suitable hinge. The effect of the bars A and B when the lid is opened is to draw the 70 lid in the direction of the desk and to retain the same securely in a horizontal position.

It will be evident that the function of the bent portion of the lower link is twofold. First, it serves the purpose of causing the el- 75 bowing of the links at the point of the pivotal connection when the desk-lid is raised, and, second, it performs the function of directing the strain when the desk-lid is open. Lying substantially parallel, as it does when 80 the desk-lid is open, its tendency is to draw the lid directly back upon the hinge and to prevent the upward strain upon the hinge, as it would do if the two links were set forming the hypotenuse of a right-angle triangle when 85 the lid is open. Furthermore, by bending or curving the lower link in a manner as set forth it lies flush with the desk-lid when the lid is open and is therefore out of the way.

Having thus described my invention, what 90 I claim to have invented, and desire to secure

by Letters Patent, is-

1. In a desk-lid support, the combination with the desk and its lid, of an upper supporting member pivoted at its upper end to 95 the inner face of one side of the desk, a lower supporting member having a shoulder integral with the same near its upper end and which is adapted to be engaged by the lower end of the upper member, said lower member 100 having its lower portion curved outwardly and pivoted in the desk-lid, said curved portion of the lower member adapted to lie flush with one face of the desk-lid when the latter

is in its open position, and means extending through the upper end of the lower member and the lower end of the upper member for pivotally connecting the two members to

5 gether.

2. In a desk-lid support, the combination with the desk and the lid hinged thereto, of an upper link pivoted at its upper end to the inner face of one side of the desk, a lower link having its lower portion curved outwardly and pivoted to the desk-lid so as to lie flush with one face of said desk-lid when the latter is open, and adapted to prevent

strain upon the hinges of the lid when the latter is open and supported by said pivoted 15 links, and suitable means for pivoting the two links together, so that when the desk-lid is raised, the two links will elbow at said means and allow the lid to be readily closed.

In testimony whereof I have hereunto set 20 my hand in presence of two subscribing wit-

nesses.

WILLIAM HOLT.

Witnesses:

EDWARD TAGGART, JAMES B. DAVIES.